Amendments to the Claims

This listing of claims will replace all prior versions, and listings of claims in the application.

1. (currently amended) A catheter comprising:

an elongated tubular member having a proximal end and a distal end;

a balloon positioned at the distal end of the tubular member, the balloon having a distal end;

an inflation lumen extending through the elongated tubular member for providing an inflation fluid for the balloon;

a guidewire tubular member extending from a position proximal the balloon through the balloon to a position distal the balloon, the guidewire tubular member having a proximal segment formed of a first material having a first flexibility bonded to ~~and~~ a distal segment formed of a second material different from the first material and having a second flexibility; and

a bond joining the balloon distal end to the proximal segment and the distal segment.

2. (new) The catheter of claim 1, wherein the first material is a trilayer of HDPE/Peaxar Resin/Pebax 6333.

3. (new) The catheter of claim 1, wherein the second material is Pebax 7033.

4. (new) The catheter of claim 1, further comprising an exit port proximal of a proximal end of said balloon, wherein said exit port provides access to said guidewire tubular member.

5. (new) The catheter of claim 1, wherein the second flexibility is greater than the first flexibility.

6. (new) A method of constructing a catheter comprising the steps of:

providing an elongated tubular member having a proximal end and a distal end;

positioning a balloon at the distal end of the tubular member, the balloon having a distal end;

providing a guidewire tubular member extending from a position proximal the balloon through the balloon to a position distal the balloon, the guidewire tubular member having a proximal segment having a first flexibility and a distal segment having a second flexibility; and

bonding the balloon distal end to the proximal segment and the distal segment, the bonding step comprising the steps of,

inserting a mandrel through the guidewire tubular member,

abutting the proximal segment and the distal segment of the guidewire tubular member,

positioning the distal portion of the balloon over the abutting segments,

applying a heat source to bond the distal portion of the balloon, the proximal segment, and the distal segment.

7. (new) The method of claim 6, wherein the heat source is a laser.

8. (new) The method of claim 6, wherein the heat source is an RF source.

9. (new) The method of claim 6, wherein the proximal segment is formed of a first material and the distal segment is formed of a second material different from the first material.

10. (new) The method of claim 9, wherein the first material is a trilayer of HDPE/Peaxar Resin/Pebax 6333.

11. (new) The method of claim 9, wherein the second material is Pebax 7033.